Brown AND Caldwell

122 South Swan Street
Albany, NY 12210

T: 518.560.5910
F: 518.560.5920

Technical Memorandum

Prepared for: F. A. Bartlett Tree Expert Company; The West Firm, PLLC

Project Title: Bartlett Tree Company Site

Project No.: 139990.860

Technical Memorandum

Subject: New Cassel/Hicksville Groundwater Contamination Superfund Site

Date: September 26, 2013

To: David Marren, Esq. (Bartlett) and Alita Giuda, Esq. (West Firm)

From: Frank J. Williams

Table of Contents

List of Figures

List of Tables

Section 1: Introduction

This memorandum presents the hydrogeological and chemical evidence relevant to deciding whether or not F. A. Bartlett Tree Expert Company (Bartlett) contributed to the groundwater contamination associated with the New Cassel/Hicksville Groundwater Contamination Superfund Site (the NCH site). Bartlett operates a tree care facility at 345 Union Avenue in the Village of Westbury (Figure 1). The facility is on a 0.4 acre parcel of land that has been use continuously since the mid 1950s by Bartlett as a base for its tree care operations in the Nassau County, New York area. As described below, limited potential pesticide contamination was identified on this property beginning in 1987, which led to Bartlett voluntarily entering into an Order on Consent with the NYSDEC, and engaging in significant remedial investigation and remediation at the property. Due to this extensive work, Bartlett is very knowledgeable of the site conditions, its underlying hydrogeology, the nature and extent of contamination at its property, as well as potential off-site sources of contamination. This memorandum is intended to provide the reader with the benefit of the information Bartlett has already acquired relative to its property, and that may be useful to EPA's investigation of sources of the primary contaminants of concern at the NCH site.

The materials attached to EPA's Request for Information (Attachment A) describe the NCH site as an area of widespread groundwater contamination in the towns of North Hempstead, Hempstead and Oyster Bay. The site location map provided by the EPA indicates that the area of observed groundwater contamination is approximately one-half mile south of the Bartlett facility and does not include it (Figure 1). According to the EPA, the primary contaminants of concern at the NCH site are tetrachloroethene (PCE), trichloroethene (TCE) and other, unspecified volatile organic compounds (VOCs).

1.1 Bartlett Facility

The Bartlett facility is located in an urban, mixed-use neighborhood of commercial and industrial facilities and residences. Figure 2 shows the Bartlett facility and the adjoining properties as they appeared in a 2007 aerial photograph. The facility is bordered on the north by a municipal parking lot; on the east by a construction materials warehouse; on the south by Union Avenue, followed by the Long Island Railroad, a parking lot and cemetery; and on the west by the former Union Oil facility, now a taxi fleet maintenance facility and construction contractor's storage yard.

The Bartlett facility consists of a two-story office/garage structure with paved driveway and parking areas. Prior to their demolition in 2008, the facility also had a garage/storage structure along the east side of the property and an open shed at the north end. Bartlett's service vehicles are parked in the northern portion of the facility and, temporarily, in a locked garage on the ground floor of the office building near the facility entrances on Union Avenue. A mechanics pit once used for routine maintenance of Bartlett's vehicles was located in the garage. The mechanics pit was closed under NYSDEC auspices in 2009. Prior to 2008, small amounts of plant health care materials were stored in a locked, fire proof storage container in the structure on the east side of the facility. The structure had a concrete floor and met or exceeded relevant state and federal regulations for the storage of such materials. After the buildings were demolished, the storage container was relocated to the north side of the office building. Until 2008, sanitary wastes from the office building were discharged to a cesspool (Drywell 3) near the northwest corner of the building. In 2009, after the office building was connected to the municipal sanitary sewer system, Drywell 3 was closed under DEC auspices (Brown and Caldwell Associates, March 2010, submitted herewith as Index No. 18). Drywell 1 was located south of the former open shed. It was constructed of brick, probably before Bartlett's occupancy, and its intended purpose remains unknown. As discussed below, Bartlett removed Drywell 1 in 2012 as an

Interim Remedial Measure (IRM) conducted under NYSDEC auspices (Brown and Caldwell Associates, April 2013, submitted herewith as Index No. 27).

1.2 Regulatory History of the Facility

On May 5, 1987, Bartlett investigated a report that an abandoned "cistern" at the Bartlett facility (Drywell 1) held empty pesticide containers. Upon investigation, Bartlett found that Drywell 1 was partially filled with water, which Bartlett sampled. Bartlett also recovered two Sevin containers (empty, crushed 5-gallon metal pails). After the inspection, Drywell 1 was backfilled with clean sand out of concern that it could collapse under driveway traffic. The sample of the standing water was analyzed and found to contain pesticides. Bartlett reported its findings to the Nassau County Department of Health (NCDH) in 1990 in response to the County's inspection of the facility at about that time. In April 1990, an anonymous caller to the NYSDEC claimed that pesticides and herbicides were periodically placed into Drywell 1 prior to abandonment of the drywell in 1983.

In 1996-1998, the DEC conducted a Preliminary Site Assessment (PSA) to determine if a potential source of soil and/or groundwater contamination existed at the Bartlett facility (Dvirka and Bartilucci, 1998, submitted herewith as Index nos. 7, 8 and 9). Soil and groundwater samples[1] were collected by direct push (GeoProbe®) methods and analyzed for VOCs, SVOCs, pesticides, organochlorine pesticides, PCBs, cyanide and metals. Pesticides and VOCs (primarily benzene, ethylbenzene, and xylene) were detected in soil samples from beneath Drywell 1. Groundwater samples from beneath Drywell 1 contained pesticides and the VOCs ethylbenzene and total xylenes. PCE, TCE and cis and trans isomers of 1,2-dichloroethene (DCE) were also detected in groundwater. TCE and DCE were found in the deeper groundwater samples (62' bgs) obtained at both upgradient and downgradient locations, but not in the sample from directly beneath Drywell 1. PCE was detected in the shallower upgradient sample and in the deeper upgradient sample. The NYSDEC concluded that the PSA findings suggest an off-site source for DCE, TCE and PCE.

In 2000, on the basis of the PSA results, the NYSDEC added the Bartlett facility to its Registry of Inactive Hazardous Waste Disposal Sites, stating that the following listed hazardous wastes had been confirmed: Dieldrin, Endrin, alpha-Chlordane, DDD, DDT, and gamma-BHC (Lindane). No VOCs were cited as a basis for listing the Bartlett facility. The NYSDEC stated in its Inactive Hazardous Waste Disposal Report that several chlorinated solvents (PCE, TCE, and DCE) were found both upgradient and downgradient of the Bartlett facility, suggesting an off-site source.

In 2007 Bartlett entered into an Order on Consent and Administrative Settlement with the NYSDEC. An RI/FS Work Plan (Brown and Caldwell Associates, March 2008, Index No. 11 submitted herewith) was developed and approved by the NYSDEC, and a Remedial Investigation (RI) was conducted pursuant to the approved plan. Two interim RI data summary reports (Index Nos. 16 and 19 submitted herewith) were submitted to the NYSDEC as the RI progressed, and the draft RI Report was submitted to NYSDEC in August 2013 (Brown and Caldwell Associates, August 2013, Index No. 28 submitted herewith). In conjunction with the RI, Bartlett remediated Drywell 3 and the mechanics pit, and implemented an IRM to remediate Drywell 1. Figure 3 shows the facility and the RI sample locations. The findings pertinent to VOCs are discussed in Sections 2 and 3, and the relevant work plans and construction reports are included with this submittal as Index Nos. 15, 18, 22, 23, 25, 27.

---

[1] Groundwater samples collected by the direct-push methods used in the 1998 PSA are usually turbid, which can cause analytical results to be biased high. Unless the samples are field-filtered to reduce turbidity prior to analysis, the results should not be considered representative of actual groundwater concentrations. The PSA samples were not field-filtered.

1.3 Surrounding Property Uses

Numerous commercial and industrial facilities are located near the Bartlett facility. Publicly available environmental records (Environmental Data Resources, Inc.; May 2007) indicate some of these facilities generated or spilled waste materials containing VOCs or other hazardous substances. Table 1 lists sur rounding facilities in counterclockwise order.

Table 1. Nearby Spills and Waste Generators

Name	Address	Distance from Bartlett	Wastes Generated or Released	Remarks
Rodale Electronics Corporation	475 Union Avenue	Approximately 1300 feet east-northeast of Bartlett.	Generator of hazardous wastes including spent halogenated solvents (F001) and ignitable (D001).	
General Semicon-ductor, Inc. and/or Vishay General Semiconductor, LLC	172 Spruce Street	Approximately 1000 feet northeast of Bartlett	Generator of characteristic hazardous wastes including corrosive (D002) and mercury toxicity (D009).	The facility has been registered as a RCRA Large Quantity Generator of hazardous waste, and has been subject to RCRA Corrective Action. The facility is listed as having received numerous notices of violation.
Frank's Auto Body	340 Maple Avenue	Approximately 600 feet north of Bartlett.	Generator of spent non-halogenated solvents (F005).	
Harry's Automotive	200 Post Avenue	Approximately 60 0 feet northwest of Bartlett.	Generator of spent non-halogenated solvents (F005).	
Union Oil	333 Union Avenue	Adjoins Bartlett on the west.	Gasoline and #2 fuel oil. Failure of underground tank tests.	Bartlett briefly rented parking space on this property, however, the wastes released at this site pre-dated Bartlett's rental, and Bartlett observed no activities related to underground tanks, or their remediation, during its tenancy.
Various dry cleaning establishments	123 Post Avenue	Approximately 500 feet west of Bartlett.	Generator of listed hazardous wastes including spent halogenated solvents (F001, F002).	The 123 Post Avenue Site is a Class 2 State Superfund site with confirmed releases to groundwater of PCE and its breakdown products TCE and DCE.
Len-Tone Auto, Inc.	401 Railroad Avenue	Approximately 200 feet southeast of Bartlett.	Generator of spent non-halogenated solvents (F003, F005).	
Stewart Taxi	371 Union Avenue	Approximately 200 feet east of Bartlett.	Waste oil. Caller stated unknown material/petroleum, etc. was suspected to have been dumped in a hole in the floor.	It is not uncommon for waste oil to be contaminated with VOCs and other hazardous substances.
Senator Printing Corporation	134 Linden Avenue	Approximately 400 feet east of Bartlett.	Unknown petroleum. Caller stated photochemicals were dumped into sink drains, alcohol based printing solutions were dumped into drywells.	

Additionally, according to a 1968 Sanborn fire insurance map (Environmental Data Resources, Inc. May 2007), the building located at 355-357 Scally Place, Westbury, NY was used for electronics manufacturing, a type of industry that has been associated with the use of chlorinated solvents. The same Sanborn map

indicates the adjacent building at 351 Scally Place was used as an optical goods warehouse. These two buildings are located approximately 50-100 feet from the northeast corner of the Bartlett property in an area that is partially upgradient from Bartlett (see Section 2). As late as 2009, 355 Scally Place was occupied by Westbury Electronic Service, according to a website maintained by the company (www.westburyelectronic.com/dett_news.php?idn=6). Records maintained by the United States Patent and Trademark Office (http://tess2.uspto.gov) indicate a trademark was registered on October 19, 1982 to Fil-Coil Company, Inc. at 351 Scally Place, Westbury, NY 11590. The USPTO entry for Goods and Services is "Radio Frequency Interference Filters and Capacitors." A web-site maintained by Custom Power Systems (http://www.custompowersystem.com) states that its affiliate, Fil-Coil FC, Inc., is a leading manufacturer of electromagnetic filters for power lines, data communications, radio frequency interference/electro-magnetic interference, and MRI (magnetic resonance imaging) rooms.

Section 2: Hydrogeologic Setting

This section presents a description of regional and local hydrogeology as it relates to understanding groundwater contamination in the vicinity of the Bartlett facility.

2.1 Regional Hydrogeology

Three main water bearing units are found on Long Island – the upper glacial aquifer of Pleistocene age and the underlying Magothy and Lloyd aquifers of upper Cretaceous age. In the area of the Bartlett facility, the upper glacial aquifer is comprised of glacial outwash consisting of sand and gravel (Busciolano, 2002). The Gardiners Clay and "20 Foot" Clay, which are marine clay deposits of Pleistocene age along the south shore of Long Island, are reportedly absent in the area of the Bartlett facility (Doriski, 1983). In this portion of Long Island the upper glacial aquifer directly overlies the Magothy aquifer, which generally consists of fine to medium grained sand with interbedded lenses of coarse sand and sandy to solid clay. Doriski, 1983 mapped the surface of the Magothy aquifer in the area of the Bartlett facility at an elevation of approximately 50 feet NGVD. A regional groundwater divide separates Long Island's aquifers into a northern zone where groundwater flows north and discharges to Long Island Sound, and a southern zone where groundwater flows south and discharges to the Atlantic Ocean. The Bartlett facility is south of this divide, and regional groundwater flow is to the south-southwest (Figure 1). The PSA report prepared for NYSDEC (Index Nos. 7, 8, and 9 submitted herewith) stated that regional groundwater flow in the area of the Bartlett facility is approximately south 30^0 west.

2.2 Hydrogeology at the Bartlett Facility

The geologic materials encountered by RI borings are depicted in cross section A-A' (Figures 3 and 4). Consistent with the aforementioned regional studies, the upper-most geologic materials are glacial outwash deposits of fine to medium sand and fine to medium gravel. A 20-foot thick layer of clayey silt is present at approximately 40 to 60 feet bgs. At monitoring well MW-3, the surface of the clayey silt is deeper (57 feet bgs). Soil borings elsewhere at the facility were not deep enough to confirm the presence of this clayey silt layer, but there is evidence that it is laterally extensive (see below). The deposits encountered below the clayey silt layer are fine to medium sand and fine to medium gravel. Deeper sand and gravel zones contain a number of discrete lenses of silty clay or clayey silt. As shown in Figure 4, the clayey silt layer and its interface with the underlying sand and gravel deposits are at an elevation of approximately 50 feet NGVD, the elevation of the Magothy formation mapped by Doriski. Thus, at least in the immediate vicinity of the Bartlett facility, the Magothy aquifer is separated from the upper glacial aquifer by a relatively impermeable aquitard.

There are two deep monitoring wells screened below the clayey silt layer, MW-1D and MW-2D. Continuous water level measurements recorded by in-well pressure transducers (Figure 5) indicate a persistent, southerly gradient from MW-1D to MW-2D,[2] consistent with regional groundwater flow. The continuous water level data also indicate the Magothy aquifer is locally isolated from the shallow glacial aquifer by the clayey silt layer; a weekly pattern of fluctuation in the deep monitoring wells (apparently caused by regular pumping from the Magothy) is not seen in the shallow wells (MW-1S and MW-2S).

---

[2] Figure 5 shows several brief spikes in the water level recorded in MW-2D during a prolonged rain event on April 25-26, 2010. The spikes are attributed to storm water flooding the flush-mount well vault and entering the well through the PVC riser, which was temporarily open to accommodate the pressure transducer cable.

Shallow groundwater in the immediate vicinity of the Bartlett facility typically flows in a west or west-southwest direction (Figure 6), apparently due to local influences. The pattern on the particular date represented on Figure 6 varies, and may be influenced by sporadic operation of a nearby sump pump, groundwa ter recovery well, or sewage pump station. Monitoring wells MW-4 and, to a lesser extent, MW-2S are downgradient from Drywell 1. A detailed discussion of groundwater flow is available in the RI Report, which was submitted with herewith as Index Number 28.

Section 3: Data Analysis

An analysis of the significant body of chemical and hydrogeological data produced during the RI indicates the Bartlett facility is not a contributor to the groundwater contamination associated with the NCH site.

3.1 Composition of the Groundwater Contamination

The groundwater at the Bartlett facility is contaminated above groundwater standards by TCE and its principle breakdown product, cis 1,2-DCE (hereinafter cis DCE). In four rounds of groundwater sampling conducted over a four year period, the only VOCs detected at concentrations above 6NYCRR Part 703 Class GA groundwater standards are TCE and cis DCE. With one questionable exception, all such exceedences occurred in the off-site, upgradient deep monitoring well MW-1D (Figure 7). The TCE and cis DCE concentrations at MW-1D have been relatively consistent over time, ranging from 31 ppb to 120 ppb for TCE and from 19 ppb to 48 ppb for cis DCE. On one occasion, there was a slight exceedence of the 5 ppb TCE standard in monitoring well MW-2S, which is located southwest of Drywell 1. Only trace levels of TCE (1J ppb – 2J ppb) were detected in the other samples from that well, indicating the 8 ppb result may be anomalous. Tetrachloroethene (PCE) was detected in groundwater at a number of locations across and upgradient from the Bartlett facility, at concentrations below the Part 703 groundwater standard. The maximum PCE concentration (4 ppb) was detected at two locations, including upgradient/sidegradient well MW-1S and well MW-4, indicating widespread presence unrelated to a source on the Bartlett facility.

3.2 VOCs Used at the Bartlett Facility

The VOCs used at the Bartlett facility did not cause the identified groundwater contamination. There is no information indicating Bartlett used or released products containing TCE or cis DCE. This is corroborated by the soil analytical data, which indicate there are no residues of TCE or cis DCE capable of adversely impacting groundwater quality. The highest soil concentrations of TCE and cis DCE are between 2 ppb and 5 ppb, well below the 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) for protection of groundwater (470 ppb for TCE, 250 ppb for cis DCE).

The only VOCs present in soil above the SCOs for protection of groundwater are the non-chlorinated hydrocarbons ethylbenzene, toluene and isomers of xylene, which were detected in samples of soil from beneath Drywell 1 and inside Drywell 3 before these structures were remediated. It is important to note that SCOs only indicate a concentration at which there is a *potential* for soil contamination to leach and act as a long-term source of groundwater contamination; the RI groundwater data indicate no such impacts have occurred. The common laboratory contaminant methylene chloride was detected once above the SCO for protection of groundwater, in a soil sample collected from beneath Drywell 1 before it was remediated. Again, this only indicates a potential to impact groundwater quality; the groundwater data indicate no methylene chloride impacts have occurred.

Bartlett may have used an inconsequential amount of PCE during routine maintenance of its service vehi cles. Prior to closure of the mechanics pit, PCE was detected at 21 ppb in a sample of soil taken from the surface of the pit's concrete base. This is not surprising, as PCE is a component of widely used carburetor and brake cleaners. The PCE detected inside the mechanic's pit was not capable of impacting groundwater quality for the following reasons: 1) the concentration (21 ppb) was well below the SCO for protection of groundwater (1,300 ppb); 2) no PCE was detected in the soil directly under the pit's concrete base; and 3) the water table is approximately 30 feet below the mechanic's pit, and leaching of PCE by precipitation would have been prevented by the building. PCE was detected at 700 ug/m^3 and 1,070 ug/m^3 in sub-slab soil vapor samples from beneath the office building in 2008 and 2012 (Brown and Caldwell Associates, May

2012, submitted herewith as Index No. 24). Equilibrium partitioning calculations based on Henry's law indicate the concentrations of PCE in groundwater could produce the concentrations of PCE detected in soil gas. It is also possible that PCE vapors diffusing from the nearby mechanics pit structure migrated under the floor slab to the soil vapor sampling point. In either case, the PCE detected in sub-slab soil vapor does not suggest Bartlett caused PCE contamination of groundwater.

3.3 Direction of Groundwater Flow

The direction of groundwater flow relative to hypothetical sources of contamination confirms that the VOCs of concern to EPA's inquiry were not generated by Bartlett. The RI data indicate the TCE and DCE groundwater contamination is originating at an upgradient source, probably located north or northeast of the Bartlett facility. The TCE and DCE have been found consistently above groundwater standards in off-site monitoring well MW-1D only (Figure 7), located north of the Bartlett facility and screened below the clayey silt layer. Regional groundwater flow as well as water level data recorded in MW-1D and MW-2D (Figure 5) confirm MW-1D is upgradient from the Bartlett facility. There are no TCE or DCE residues in the soil near MW-1D that could be causing the groundwater impacts found in this well. The RI data also indicate that relatively low levels of PCE are originating outside the Bartlett facility. Shallow groundwater in the vicinity of MW-1S (also located north of the Bartlett facility) generally flows in a west-southwesterly direction, indicating one or more sources of PCE are north or east of the Bartlett facility.

Section 4: Conclusion

The RI data indicate that the significant VOC contamination in the vicinity of the Bartlett facility consists of TCE and cis DCE originating at one or more sources outside the Bartlett facility. No other VOCs have been detected in groundwater above the 6 NYCRR Part 703 groundwater standards. PCE has been detected at concentrations below the Part 703 groundwater standard in a number of monitoring wells, including upgradient/side gradient well MW-1S, indicating one or more sources outside the Bartlett facility.

Extensive sampling of soil during the RI found no residues of TCE, cis DCE or PCE on the Bartlett facility that could be impacting groundwater quality. These chlorinated VOCs were detected at shallow depths, at very low concentrations, in the mechanic's pit, test pit number 1, and the stairwell floor drain, with 30 feet separating them from the water table. The soil concentrations were so far below the 6NYCRR Part 375 SCOs for protection of groundwater that there would be no threat to groundwater quality even if they were somehow exposed to potential leaching by precipitation.

Low concentrations of non-chlorinated, petroleum-derived hydrocarbons (toluene, ethylbenzene, xylenes) were detected in soils under Drywell 1 and inside Drywell 3 before Bartlett remediated these structures. Although the SCOs for protection of groundwater would indicate a *potential* for these soils to have adversely impacted groundwater quality under certain conditions, no such impacts actually occurred. This is not surprising considering that the impacted soils were separated from the water table by 15 feet or more. In any case, all soils containing concentrations greater than the SCOs were removed during the Drywell 1 IRM and the closure of Drywell 3.

The NYSDEC concluded that the 1998 PSA suggested an off-site source for DCE, TCE and PCE. The RI data continue to support this conclusion. The RI data demonstrate that the only VOC residues on the Bartlett property that had a potential to impact groundwater quality never actually did, and Bartlett's extensive remedial actions ensure no impacts will occur in the future.

References

Brown and Caldwell Associates, March 2008. Remedial Investigation/Feasibility Study Work Plan, Bartlett Tree Company Site, Nassau County, New York, DEC Site Registry No. 130074.

Brown and Caldwell Associates, March 2010. Closure of Drywell 3 and Mechanic's Pit, Remedial Action Report, Bartlett Tree Company Site, Westbury, New York, DEC Site Registry No. 130074.

Brown and Caldwell Associates, May 2012. Letter report to NYSDEC re Results of March 2012 Air and Sub-Slab Vapor Sampling Bartlett Tree Company Site, NYSDEC Site Registry No. 1-30-074. May 8, 2012.

Brown and Caldwell Associates, April 2013. Construction Completion Report, Drywell 1 – IRM Implementation, Bartlett Tree Company Site, DEC Site No. 1-30-074, Village of Westbury, Nassau County, New York.

Brown and Caldwell Associates, August 2013. Draft Remedial Investigation Report, Bartlett Tree Company Site, DEC Site No. 1-30-074, Village of Westbury, Nassau County, New York.

Busciolano, R. "Water-Table and Potentiometric-Surface Altitudes of the Upper Glacial, Magothy, and Lloyd Aquifers on Long Island, New York, in March-April 2000, with a Summary of Hydrogeologic Conditions." U.S. Geological Survey. 2002.

Doriski, T.P. and Wilde-Katz, F. "Geology of the '20-Foot' Clay and Gardiners Clay in Southern Nassau and Southwestern Suffolk Counties, Long Island, New York." U.S. Geological Survey. 1983.

Dvirka and Bartilucci. "Preliminary Site Assessment, Bartlett Tree Company, Westbury, Nassau County, New York, DEC Registry No. 130074." April 1998.

Environmental Data Resources, Inc. May 2007. EDR Radius Map with GeoCheck®, Bartlett Tree Company, 345 Union Ave., Westbury, NY 11590, Inquiry Number: 1923678.2s. May 9, 2007.

USEPA, 2013. Request for Information Letter from Nicoletta Diforte, USEPA, to Robert Bartlett, F.A. Bartlett Tree Expert Company, with attachments. July 31, 2013.

FIGURES

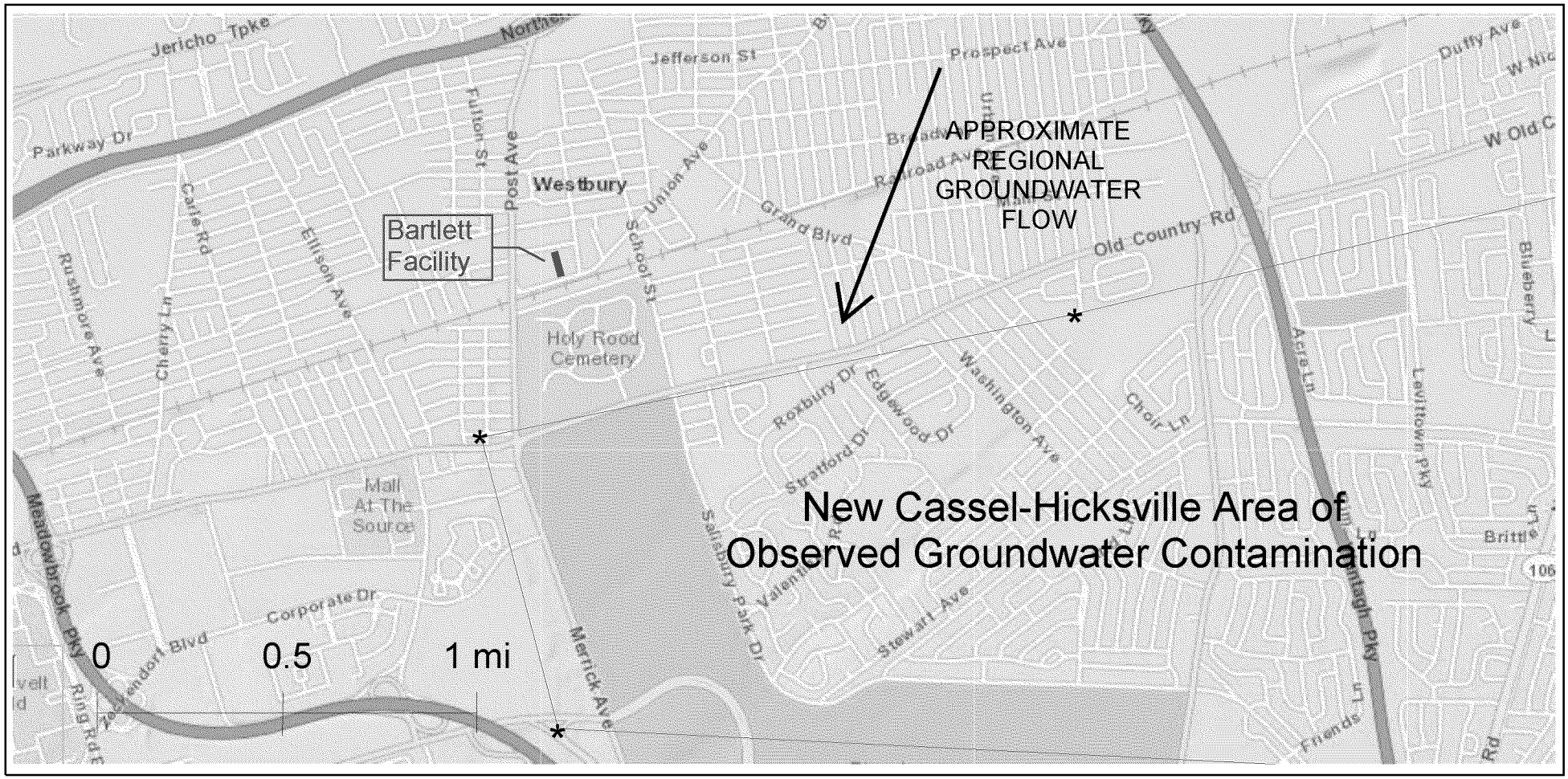


FIGURE 1
LOCATION OF BARTLETT FACILITY

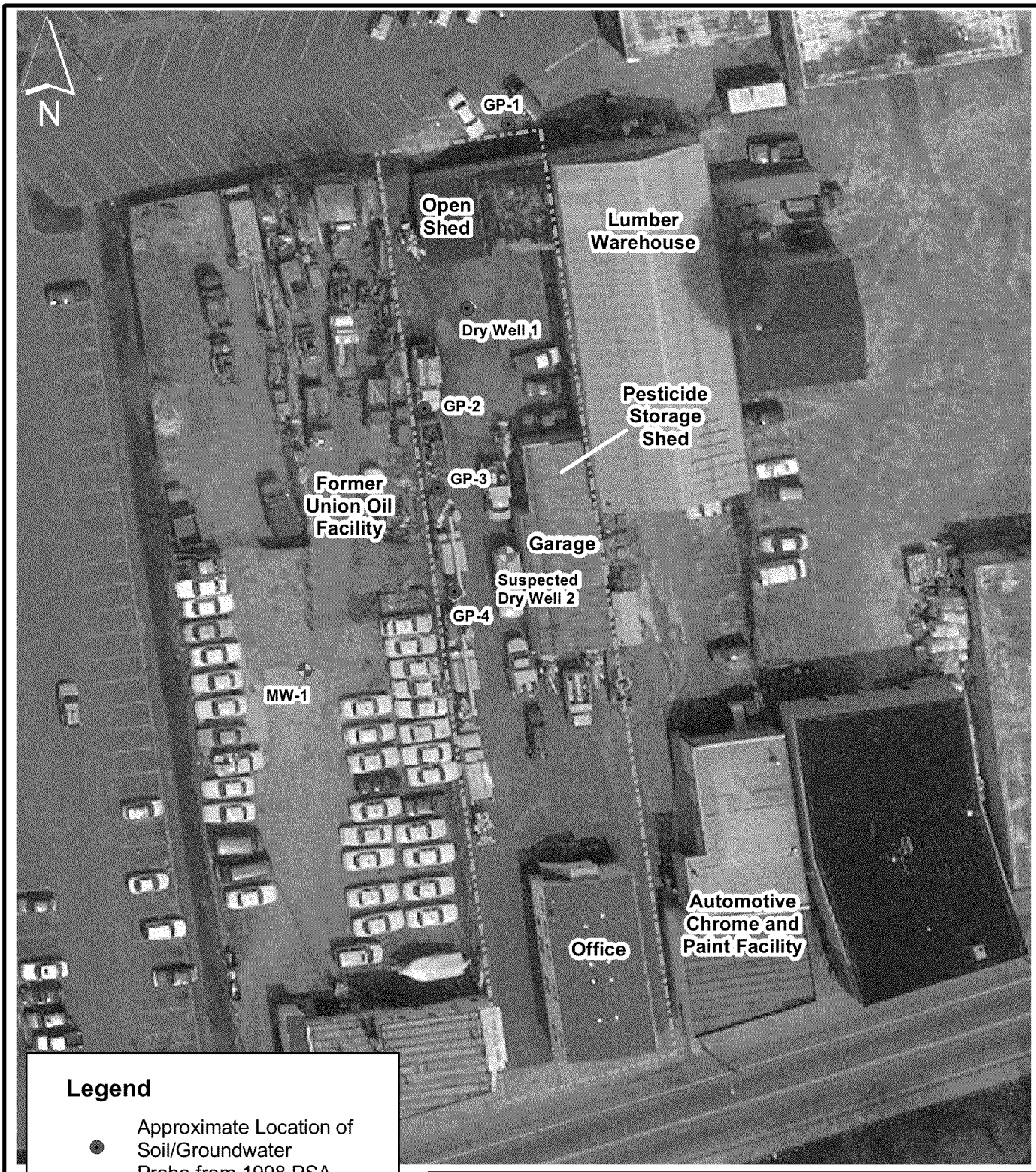


FIGURE 2
BARTLETT FACILITY
AND ADJACENT PROPERTIES
(circa 2007)

BARTLETT TREE
COMPANY SITE
WESTBURY, NASSAU COUNTY
NEW YORK, 11590

DATE	PROJECT NUMBER
07/07	132354.002

BROWN AND CALDWELL
ASSOCIATES

P:/GIS/Bartlett_Tree/Site_Plan.mxd

N

A'

Building

VILLAGE OF WESTBURY
PARKING LOT

SB-11

MW-1D

MW-1S

Chain link Fence

Grate=104.28
Storm MH

Concrete Curb

Wood Fence

Edge of Pavement

0.4'

0.2'

SB-12

SB-7

FORMER
OPEN
SHED

TEST PIT 1
MACADAM PATCH

TP-1

SB-4

MW-4

SB-3

SB-10

SB-5

B

Chain link Fence

DRYWELL 1

SB-1

MW-2D

MW-2S

MW-3

B'

MASONRY
WAREHOUSE

SB-6

FORMER
PESTICIDE
STORAGE
LOCKER

0.4'

MW-5

A

SB-9

FORMER
GARAGE

SB-2

Remains of Foundation

LOT 786

LOT 787

LOT 792

LOT 207

LOT 206

Paved
Parking
Lot

DRYWELL 3

TEST PIT 2
MACADAM PATCH

SB-8

Enclosed
Pesticide
Storage
Area

TP-2

Drain & Lower
Entrance
(Under Landing)

Gate

2 Story
Frame
Building

CASTLE INDUSTRIES, INC.

Paved
Driveway

No. 345

No. 319

4.9'

WV

SCO

Gas
Box

Drop Curb

Concrete Curb

ALL SEASONS TAXI

Concrete Sidewalk

UNION AVENUE

Sanitary MH
Rim=98.22

Concrete Curb

0 15 30
Feet

CROSS SECTION

MONITORING WELL

SOIL BORING

DRYWELL

TEST PIT

PAVEMENT EDGE

—103— GROUND SURFACE ELEVATION (FT., NGVD)

PROPERTY LINE

FORMER STUCTURE LOCATION
(APPROXIMATE, DEMOLISHED JULY 2008)

FIGURE 3

RI SAMPLE LOCATIONS

BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK

DATE
April 2010

PROJECT NUMBER
138944

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\GIS\Bartlett_Tree\2010_Data-Summary_Report\Site_Plan_050610.mxd

ED_001164_00032038-00016

NORTH
A'

SOUTH
A

SB-11 | MW-1D | MW-1S | SB-12 | SB-7 | SB-4 | DW-1/SB-10 | SB-1 | MW-2D | MW-2S | MW-5

110 100 90 80 70 60 50 40 30 20 10 0 -10 -20

DRY WELL 1
(WIDTH DIMENSIONS
ESTIMATED)

UPPER GLACIAL SAND, GRAVEL

(75.28)
(72.35)

(74.61)
(71.86)

(74.96)

MAGOTHY CLAYEY SILT

(73.27)
(70.18)

(73.20)
(70.29)

MAGOTHY SAND, SILT, GRAVEL

MW-1S — MONITORING WELL / SOIL BORING / TEST PIT IDENTIFICATION AND APPROXIMATE LOCATION

GENERALIZED GROUND SURFACE

WELL SCREEN INTERVAL

TOTAL DEPTH OF BOREHOLE

(69.86) GROUND WATER ELEVATION FT. NGVD (4-9-09)

(69.86) GROUND WATER ELEVATION FT. NGVD (4-9-10)

ESTIMATED WATER TABLE, 4-14-2010

ESTIMATED WATER TABLE, 4-9-2009

ASPHALT PAVEMENT

SILT CLAY

UPPER GLACIAL SAND, GRAVEL

MAGOTHY - CLAYEY SILT

MAGOTHY - SAND, SILT, GRAVEL

SCALE 10 0 10 20 FEET HORIZONTAL

SCALE 5 0 5 10 FEET VERTICAL

FIGURE 4

HYDROGEOLOGIC CROSS-SECTION A-A'
F.A. BARTLETT TREE EXPERT COMPANY

BARTLETT TREE COMPANY SITE
NASSAU COUNTY, NEW YORK

DATE 4/10

PROJECT NUMBER 138944

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\DRAFTING\BARTLETT\135711.102\HYDROGEOLOGIC_CROSS_SECTION_A-A'-REV1.DWG 06/28/2010 05:14:35PM By:Rjames XREFS: Basemap Layout: 34X22

ED_001164_00032038-00017

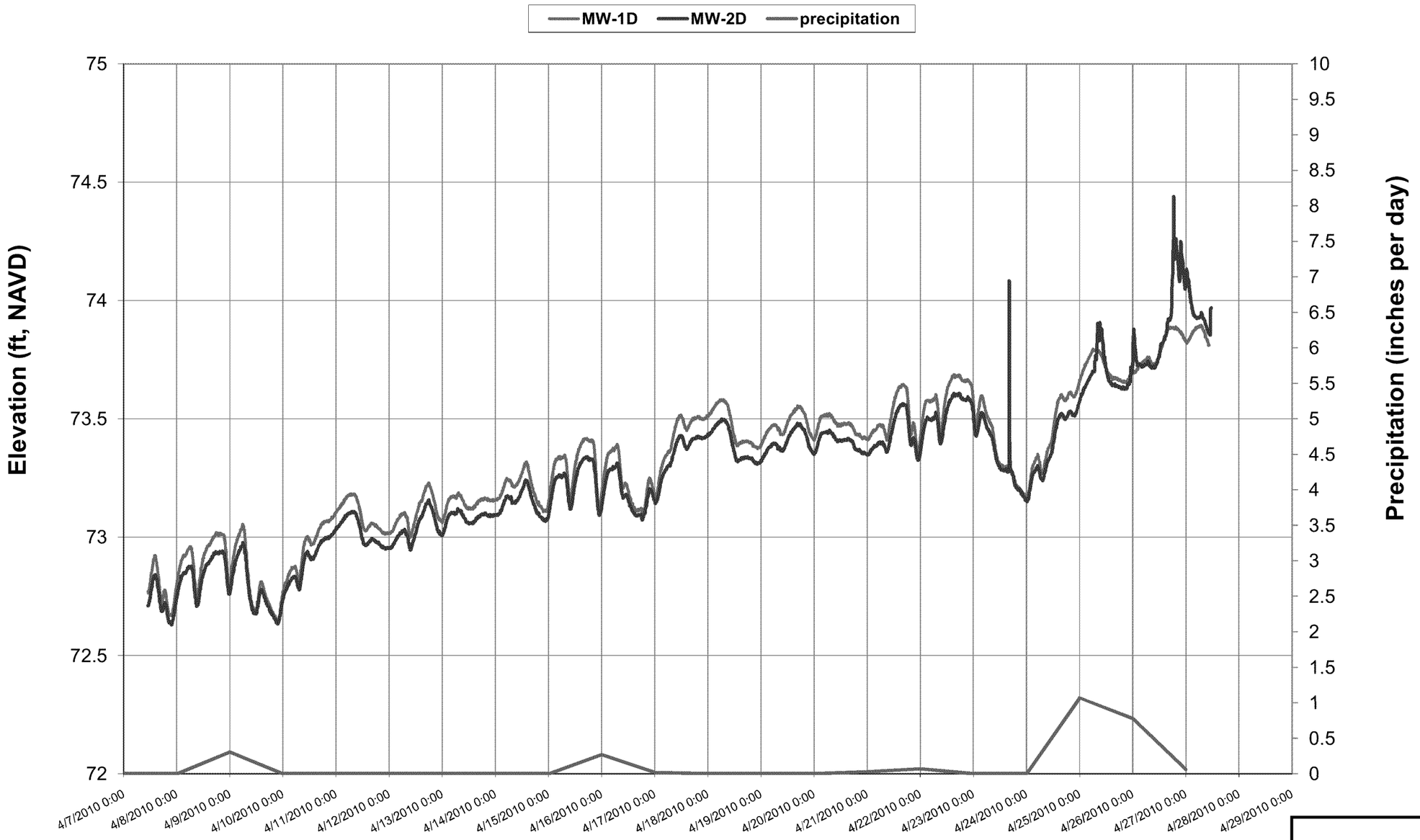


FIGURE 5

Hydrostatic Head vs Precipitation
Deep Wells
Bartlett Tree Experts

BROWN AND CALDWELL ASSOCIATES

N

VILLAGE OF WESTBURY
PARKING LOT

Building

Chain link Fence

Grate=104.28

Storm MH

MW-1S
(75.06)

Concrete Curb

Wood Fence

Edge of Pavement

0.2'

0.4'

FORMER
OPEN
SHED

TEST PIT 1
MACADAM PATCH

MW-4
(74.40)

Chain link Fence

DRY WELL 1

Regional
Groundwater
Flow

MASONRY
WAREHOUSE

MW-2S
(74.12)

MW-3
(74.85)

FORMER
PESTICIDE
STORAGE
LOCKER

MW-5
(74.33)

FORMER
GARAGE

Remains of Foundation

LOT 786

LOT 207

LOT 787

LOT 206

Paved
Parking
Lot

DRY WELL 2

TEST PIT 2
MACADAM PATCH

Enclosed
Pesticide
Storage
Area

Gate

0 10 20
Feet

74.7
74.6
74.4
74.2
74.4
74.8
74.6
74.2
75.0
105
106
104
103
102

Legend

- MONITORING WELL
- SOIL BORING
- DRYWELL
- TEST PIT
- PAVEMENT EDGE
- 103 GROUND SURFACE ELEVATION (FT., NGVD)
- PROPERTY LINE
- FORMER STUCTURE LOCATION (APPROXIMATE, DEMOLISHED JULY 2008)
- WATER ELEVATION CONTOUR (FT., NGVD) DASHED WHERE INFERRED
- 75 WATER TABLE ELEVATION (FT., NGVD)
- LOCALIZED DIRECTION OF GROUNDWATER FLOW

FIGURE 6
WATER TABLE ELEVATION CONTOURS
APRIL 1, 2010

BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK

DATE: April 2010

PROJECT NUMBER: 138944

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\GIS\Bartlett_Tree\2010_Data-Summary_Report\Figure_-GW_4_1_10.mxd

ED_001164_00032038-00019

MW-1D	10/27/2008	4/9/2009	3/23/2010	5/21/2012
1,1-Dichloroethane	1 U	1 J	1 J	1 U
1,1-Dichloroethene	0.8 U	1 J	1 J	0.8 U
Bromodichloromethane	1 U	1 U	1 U	1 U
Carbon disulfide	1 U	1 U	1 U	1 U
Chloroform	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	*38	*48	*46	*19
Dibromochloromethane	1 U	1 U	1 U	1 U
Tetrachloroethene	2 J	2 J	2 J	0.8 U
Toluene	0.7 U	0.7 U	0.7 U	0.7 U
Trichloroethene	*86	*120	*120	*31

MW-1S	10/27/2008	4/9/2009	3/23/2010	5/22/2012
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Bromodichloromethane	1 U	1 U	1 U	1 U
Carbon disulfide	1 U	1 U	1 U	1 U
Chloroform	0.8 U	0.8 U	3 J	0.8 U
cis-1,2-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Dibromochloromethane	1 U	2 J	1 U	1 U
Tetrachloroethene	0.8 U	2 J	4 J	0.9 J
Toluene	0.7 U	0.7 U	0.7 U	0.7 J
Trichloroethene	1 U	1 U	1 U	1 U

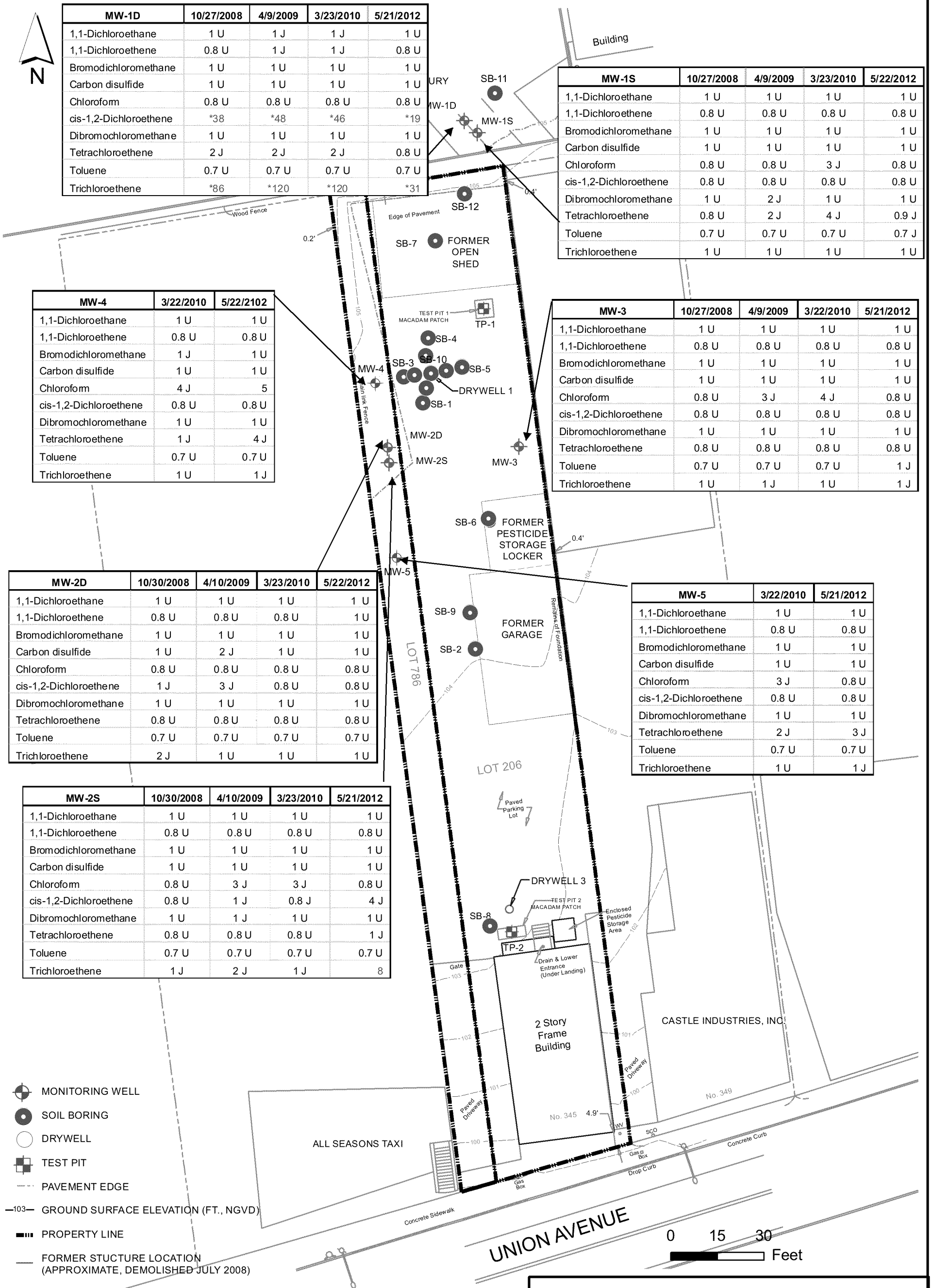
MW-4	3/22/2010	5/22/2102
1,1-Dichloroethane	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U
Bromodichloromethane	1 J	1 U
Carbon disulfide	1 U	1 U
Chloroform	4 J	5
cis-1,2-Dichloroethene	0.8 U	0.8 U
Dibromochloromethane	1 U	1 U
Tetrachloroethene	1 J	4 J
Toluene	0.7 U	0.7 U
Trichloroethene	1 U	1 J

MW-3	10/27/2008	4/9/2009	3/22/2010	5/21/2012
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Bromodichloromethane	1 U	1 U	1 U	1 U
Carbon disulfide	1 U	1 U	1 U	1 U
Chloroform	0.8 U	3 J	4 J	0.8 U
cis-1,2-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Dibromochloromethane	1 U	1 U	1 U	1 U
Tetrachloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	0.7 U	0.7 U	0.7 U	1 J
Trichloroethene	1 U	1 J	1 U	1 J

MW-2D	10/30/2008	4/10/2009	3/23/2010	5/22/2012
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U	0.8 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
Carbon disulfide	1 U	2 J	1 U	1 U
Chloroform	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	1 J	3 J	0.8 U	0.8 U
Dibromochloromethane	1 U	1 U	1 U	1 U
Tetrachloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	0.7 U	0.7 U	0.7 U	0.7 U
Trichloroethene	2 J	1 U	1 U	1 U

MW-5	3/22/2010	5/21/2012
1,1-Dichloroethane	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U
Bromodichloromethane	1 U	1 U
Carbon disulfide	1 U	1 U
Chloroform	3 J	0.8 U
cis-1,2-Dichloroethene	0.8 U	0.8 U
Dibromochloromethane	1 U	1 U
Tetrachloroethene	2 J	3 J
Toluene	0.7 U	0.7 U
Trichloroethene	1 U	1 J

MW-2S	10/30/2008	4/10/2009	3/23/2010	5/21/2012
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U
Bromodichloromethane	1 U	1 U	1 U	1 U
Carbon disulfide	1 U	1 U	1 U	1 U
Chloroform	0.8 U	3 J	3 J	0.8 U
cis-1,2-Dichloroethene	0.8 U	1 J	0.8 J	4 J
Dibromochloromethane	1 U	1 J	1 U	1 U
Tetrachloroethene	0.8 U	0.8 U	0.8 U	1 J
Toluene	0.7 U	0.7 U	0.7 U	0.7 U
Trichloroethene	1 J	2 J	1 J	8



Explanation of Terms and Abbreviations

U-The analyte was analzed for, but not detected. Value shown is the method detection limit (MDL) for the analyzed constituent.

J-Estimated concentration. The result is below the quantitation limit but above the method detection limit.

Results reported in micrograms per liter (ug/L)

Where applicable, table lists the higher concentration from original and duplicate sample.

*Red concentrations are above New York State Class GA Groundwater Standards or Guidance values

FIGURE 7

VOLITILE ORGANIC COMPOUND CONCENTRATIONS IN GROUNDWATER

	DATE	PROJECT NUMBER
BARTLETT TREE COMPANY SITE WESTBURY, NEW YORK	JULY, 2012	139990

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\GIS\Bartlett_Tree\GW_VOCS_071709

ED_001164_00032038-00020

N

SB-7	0-2	5-7	10-12
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
Acetone	0.007 U	0.007 U	0.007 U
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U
Methylene chloride	0.003 J	0.005 J	0.007
Tetrachloroethene	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-12	6-8	16-18	26-28	36-38
Ethylbenzene	0.001 J	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.006	0.001 U	0.001 U	0.001 U
Acetone	0.007 U	0.007 U	0.007 U	0.009 J
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 J	0.002 U	0.002 U	0.003 J
Tetrachloroethene	0.006	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U

MW-1D	65-66
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.009 U
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.002 J
MEK (2-Butanone)	0.005 U
Methylene chloride	0.003 J
Tetrachloroethene	0.001 U
Trichloroethene	0.003 J

SB-11	6-8	16-18	26-28	36-38
Ethylbenzene	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.007 U	0.008 J	0.007 U
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.002 U	0.002 U
Tetrachloroethene	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U

MW-1S	39-39.5
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.009 J
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.005 U
Methylene chloride	0.016
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

SB-4	28-30	33-34
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
Acetone	0.01 J	0.012 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U
Methylene chloride	0.007	0.008
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

TP-1	0-1
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	*0.091
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.005 J
MEK (2-Butanone)	0.016
Methylene chloride	0.006
Tetrachloroethene	0.018
Trichloroethene	0.002 J

SB-10	8-10	12-14	14-16	22-24	30-32	38-40
Ethylbenzene	0.001 U	*4.6	0.2	0.001 J	0.1	0.001 U
Toluene	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 J	*32	*18	0.1	0.68	0.001 U
Acetone	0.008 U	0.37 U	0.009 U	0.007 U	0.014 J	0.015 J
Chlorobenzene	0.001 U	0.23 J	0.012	0.001 U	0.006	0.001 U
Chloroform	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.21 U	0.005 U	0.004 U	0.004 U	0.005 U
Methylene chloride	0.004 J	0.1 U	0.005 J	0.002 U	0.002 U	*0.096
Tetrachloroethene	0.002 J	0.052 U	0.002 J	0.004 J	0.004 J	0.001 U
Trichloroethene	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U

SB-5	29-30	32-33
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
Acetone	0.008 J	0.012 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.005 U
Methylene chloride	0.003 J	0.012
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

SB-3	28-30	33-34
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
Acetone	0.011 J	0.008 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U
Methylene chloride	0.004 J	0.002 U
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

SB-1	26-27	36.5-37	62-62.5	79-79.5
Ethylbenzene	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.008 U	0.009 U	0.009 J
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.005 U	0.005 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.011	0.011
Tetrachloroethene	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U

MW-4	36-38
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.009 J
Chlorobenzene	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.005 U
Methylene chloride	0.002 J
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

MW-3	41-42
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.012 J
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.004 U
Methylene chloride	0.006
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

MW-2D	23.5-24	46-46.5
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
Acetone	0.033 J	0.013 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.007 J	0.005 U
Methylene chloride	0.002 J	0.003 U
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

MW-5	36-38
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.008 U
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.005 U
Methylene chloride	0.002 U
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

MW-2S	40-40.5
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.01 J
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.005 U
Methylene chloride	0.008
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

SB-6	0-2	5-7	10-12
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.007 U	0.007 U
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.004 U	0.004 U
Methylene chloride	0.022	0.008	0.003 J
Tetrachloroethene	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-9	7.6-8.6	14-15	17.7-18.7
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
Acetone	0.009 J	0.007 U	0.007 U
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 U	0.004 J	0.002 U
Tetrachloroethene	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-2	7-9	14-16	19-20
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.011 J	0.008 J
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 J	0.003 J	0.005 J
Tetrachloroethene	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-8	17-18	22-23	27-28
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.007 U	0.012 J
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.005 U
Methylene chloride	0.002 U	0.004 J	0.008
Tetrachloroethene	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

TP-2	1-2
Ethylbenzene	0.001 U
Toluene	0.001 U
Xylenes, total	0.001 U
Acetone	0.008 U
Chlorobenzene	0.001 U
Chloroform	0.001 U
cis-1,2-DCE	0.001 U
MEK (2-Butanone)	0.004 U
Methylene chloride	0.006
Tetrachloroethene	0.001 U
Trichloroethene	0.001 U

DW-3	
Ethylbenzene	*2.9 J
Toluene	*3.7 J
Xylenes, total	*34 J
Acetone	0.62 UJ
Chlorobenzene	0.089 UJ
Chloroform	0.089 UJ
cis-1,2-DCE	0.089 UJ
MEK (2-Butanone)	0.36 UJ
Methylene chloride	0.18 UJ
Tetrachloroethene	0.089 UJ
Trichloroethene	0.089 UJ

VILLAGE OF WESTBURY PARKING LOT
Building
Chain link Fence
SB-11
MW-1D
MW-1S
Grate=104.28
Storm MH
Concrete Curb
Wood Fence
SB-12
Edge of Pavement
0.4'
0.2'
SB-7
FORMER OPEN SHED
TEST PIT 1
MACADAM PATCH
TP-1
SB-4
SB-10
MW-4
SB-3
SB-5
DRYWELL 1
MASONRY WAREHOUSE
SB-1
MW-2D
MW-2S
MW-3
SB-6
FORMER PESTICIDE STORAGE LOCKER
MW-5
SB-9
FORMER GARAGE
SB-2
Remains of Foundation
LOT 793
LOT 792
LOT 207
LOT 206
Paved Parking Lot
DRYWELL 3
TEST PIT 2
MACADAM PATCH
SB-8
TP-2
Enclosed Pesticide Storage Area
Drain & Lower Entrance (Under Landing)
Gate
2 Story Frame Building
CASTLE INDUSTRIES
Paved Driveway
No. 349
No. 345
4.9'
ALL SEASONS TAXI
UV
SCO
Gas Box
Drop Curb
Concrete Curb
Concrete Sidewalk
UNION AVENUE
Sanitary MH
Rim=98.22
Storm MH
Rim=98.97

MONITORING WELL
SOIL BORING
DRYWELL
TEST PIT
PAVEMENT EDGE
103 GROUND SURFACE ELEVATION (FT., NGVD)
PROPERTY LINE
FORMER STUCTURE LOCATION (APPROXIMATE, DEMOLISHED JULY 2008)

Explanation of Terms and Abbreviations

U-The analyte was analzed for, but not detected. Value shown is the method detection limit (MDL) for the analyzed constituent.

J-Estimated concentration. The result is below the quantitation limit but above the method detection limit.

Results reported in milligrams per kilogram (mg/kg)

Where applicable, table lists the higher concentration from original and duplicate sample.

*Red concentrations are above one or more of the following New York State Subpart 375 Soil Cleanup Objectives: Protection of public Health (Commercial Use), or Protection of Groundwater.

0 10 20 40 Feet

FIGURE 8a

VOLITILE ORGANIC COMPOUND CONCENTRATIONS IN SOIL

BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK

DATE: APRIL, 2010
PROJECT NUMBER: 138944

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\GIS\Bartlett_Tree\2010_Data-Summary_Report\Soil_VOCs_042310.mxd

N

0.2'

SB-9

FORMER OPEN SHED

SB-103	9-11	19-21	29.5- 31.5(WT)
Benzene	0.0005 U	0.0006 U	0.0005 U
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U
Acetone	0.007 U	0.01 J	0.011 J
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.002 U
Tetrachloroethene	0.005 J	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-4	28-30	33-34
Benzene	0.0005 U	0.0006 U
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U
Acetone	0.01 J	0.012 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U
Methylene chloride	0.007	0.008
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

SB-10	8-10	12-14	14-16	22-24	30-32	38-40
Benzene	0.0006 U	0.026 U	0.0006 U	0.0005 U	0.0005 U	0.0006 U
Ethylbenzene	0.001 U	*4.6	0.2	0.001 J	0.1	0.001 U
Toluene	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 J	*32	*18	0.1	0.68	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.37 U	0.009 U	0.007 U	0.014 J	0.015 J
Chlorobenzene	0.001 U	0.23 J	0.012	0.001 U	0.006	0.001 U
Chloroform	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.21 U	0.005 U	0.004 U	0.004 U	0.005 U
Methylene chloride	0.004 J	0.1 U	0.005 J	0.002 U	0.002 U	*0.096
Tetrachloroethene	0.002 J	0.052 U	0.002 J	0.004 J	0.004 J	0.001 U
Trichloroethene	0.001 U	0.052 U	0.001 U	0.001 U	0.001 U	0.001 U

SB-102	9-11	19-21	29.8- 31.8(WT)
Benzene	0.026 U	0.0005 U	0.0005 U
Ethylbenzene	0.14 J	0.003 J	0.001 U
Toluene	0.052 U	0.001 U	0.001 U
Xylenes, total	0.19 J	0.004 J	0.001 U
1,1,2,2-Tetrachloroethane	0.079 J	0.001 U	0.001 U
Acetone	0.37 U	0.016 J	0.007 U
Chlorobenzene	0.052 U	0.001 U	0.001 U
Chloroform	0.052 U	0.001 U	0.001 U
cis-1,2-DCE	0.052 U	0.001 U	0.001 U
MEK (2-Butanone)	0.21 U	0.004 U	0.004 U
Methylene chloride	0.1 U	0.002 U	0.002 U
Tetrachloroethene	0.052 U	0.001 U	0.001 U
Trichloroethene	0.052 U	0.001 U	0.001 U

TEST PIT MACADAM PATCH

SB-4

SB-103

SB-10/SB-105

SB-5

SB-3

SB-104

SB-102

MW-4

SB-101

DRYWELL 1

SB-1

SB-105	9-11	19-21	28.7- 30.7(WT)
Benzene	0.0008 J	0.0005 U	0.0006 J
Ethylbenzene	0.1	0.002 J	0.024
Toluene	0.001 U	0.001 U	0.001 J
Xylenes, total	0.27	0.009	0.33
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U
Acetone	0.02 J	0.007 U	0.013 J
Chlorobenzene	0.003 J	0.001 U	0.009
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.004 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.002 U
Tetrachloroethene	0.001 U	0.002J	0.067
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-5	29-30	32-33
Benzene	0.0005 U	0.0007 U
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U
Acetone	0.008 J	0.012 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.005 U
Methylene chloride	0.003 J	0.012
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

Chain link Fence

SB-3	28-30	33-34
Benzene	0.0005 U	0.0005 U
Ethylbenzene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U
Acetone	0.011 J	0.008 J
Chlorobenzene	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U
Methylene chloride	0.004 J	0.002 U
Tetrachloroethene	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U

MW-2D

MW-2S

MW-3

SB-101	9-11	19-21	29.7- 31.7(WT)
Benzene	0.0005 U	0.0005 U	0.0005 U
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U
Acetone	0.013 J	0.01 J	0.03
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.002 U
Tetrachloroethene	0.003 J	0.002 J	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

SB-104	9-11	19-21	30.1- 32.1(WT)
Benzene	0.0005 U	0.0005 U	0.0005 U
Ethylbenzene	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U
Acetone	0.007 U	0.02 J	0.007 U
Chlorobenzene	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.004 U	0.004 J	0.004 U
Methylene chloride	0.002 U	0.002 U	0.002 U
Tetrachloroethene	0.005 J	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U

MW-5

SB-1	26-27	36.5-37	62-62.5	79-79.5
Benzene	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Ethylbenzene	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes, total	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U	0.001 U
Acetone	0.008 U	0.008 U	0.009 U	0.009 J
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-DCE	0.001 U	0.001 U	0.001 U	0.001 U
MEK (2-Butanone)	0.005 U	0.005 U	0.005 U	0.004 U
Methylene chloride	0.002 U	0.002 U	0.011	0.011
Tetrachloroethene	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U

MER
ICIDE
RAGE
LOCKER

0

SB-9

SB-2

FORMER GARAGE

Remains of Foundation

0 5 10 Feet

LOT 786

104

Legend

- MONITORING WELL
- SOIL BORING
- DRYWELL
- TEST PIT
- PAVEMENT EDGE
- —103— GROUND SURFACE ELEVATION (FT., NGVD)
- PROPERTY LINE
- FORMER STUCTURE LOCATION (APPROXIMATE, DEMOLISHED JULY 2008)

Explanation of Terms and Abbreviations

U-The analyte was analzed for, but not detected. Value shown is the method detection limit (MDL) for the analyzed constituent.

J-Estimated concentration. The result is below the quantitation limit but above the method detection limit.

Results reported in milligrams per kilogram (mg/kg)

Where applicable, table lists the higher concentration from original and duplicate sample.

*Red concentrations are above one or more of the following New York State Subpart 375 Soil Cleanup Objectives: Protection of public Health (Commercial Use), or Protection of Groundwater.

FIGURE 8b

VOLATILE ORGANIC COMPOUNDS IN SOIL
VICINITY OF DRYWELL 1

BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK
DRYWELL 1 IRM

DATE: May 2011

PROJECT NUMBER: 139990.750

BROWN AND CALDWELL ASSOCIATES

P:\GIS\Bartlett_Tree\Dry_Well_1_IRM\750_WasteChar&DelSampling\Soil_VOCs_051711.mxd

ED_001164_00032038-00022

Attachment A: EPA Request for Information

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NEW YORK 10007-1866

JUL 31 2013

CERTIFIED MAIL –
RETURN RECEIPT REQUESTED

Robert A. Bartlett, CEO
The F.A. Bartlett Tree Expert Company
Greg Daniels, President and Chief Operations Officer
1290 East Main Street
Stanford, CT 06902

Re: Request for Information Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604(e), Related to the New Cassel/Hicksville Ground Water Contamination Superfund Site in the Towns of Hempstead, North Hempstead and Oyster Bay in Nassau County, New York

Dear Sir:

The U.S. Environmental Protection Agency ("EPA") is charged with responding to the release or threat of release of hazardous substances, pollutants, and contaminants into the environment and with enforcement responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9601-9675. EPA has documented the release and threat of release of hazardous substances into the environment at the New Cassel/Hicksville Ground Water Contamination Superfund Site located in the Towns of Hempstead, North Hempstead, and Oyster Bay in Nassau County, New York (the "Site"). A Site Description and a Site Location Map are enclosed. On September 16, 2011, the Site was listed on the "National Priorities List" of hazardous substance releases that has been established pursuant to CERCLA. In response to these releases and the threat of future releases, EPA has spent public funds and EPA anticipates spending additional public funds for the Site.

The Site comprises a widespread area of ground water contamination in the Towns of Hempstead, North Hempstead, and Oyster Bay. The Site is located in a heavily developed area consisting of industrial, commercial, and residential land where a variety of past industrial and commercial activities may have contributed to ground water contamination. Prior to the Site's inclusion on the National Priorities List, an EPA investigation revealed the presence of volatile organic compounds ("VOCs") including, but not limited to, tetrachloroethylene ("PCE") and trichloroethylene ("TCE") above state and federal drinking water standards in influent water in the following public water supply wells: four Town of Hempstead wells (Bowling Green 1 and 2, Roosevelt Field 10 and Levittown 2A), six Hicksville wells (4-2, 5-2, 5-3, 8-1, 8-3 and 9-3) and Westbury Water District Well 11. The aquifers underlying the Site serve as drinking water for the public water systems in the Towns of North Hempstead, Hempstead and Oyster Bay.

REQUEST FOR INFORMATION

This letter seeks your cooperation in providing information and documents relating to the Site. EPA requires that you provide a complete and truthful response to the enclosed Request for Information within thirty (30) calendar days of your receipt of this letter. Under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), EPA has broad information-gathering authority which allows EPA to require persons to provide information or documents relating to the materials generated, treated, stored, or disposed of at or transported from a facility, the nature or extent of a release or threatened release of a hazardous substance, pollutant, or contaminant at or from a facility, and the ability of a person to pay for or perform a cleanup. EPA encourages you to give this letter your immediate attention.

While EPA seeks your cooperation in this investigation, your compliance with this Request for Information is required by law. When you have prepared your response to the Request for Information, please sign and have the enclosed "Certification of Answers to Request for Information" notarized, and return the Certification to EPA along with your response. Please note that false, fictitious, or fraudulent statements or representations may subject you to civil or criminal penalties under federal law. In addition, Section 104 of CERCLA, 42 U.S.C. § 9604, authorizes EPA to pursue penalties for failure to comply with Requests for Information.

Some of the information EPA is requesting may be considered by you to be confidential business information. Please be aware that you may not withhold the information on that basis. If you would like EPA to treat all or part of the information confidentially, you must advise EPA of that fact by following the procedures described in the Instructions included in the enclosed information request, including the requirement of supporting your claim of confidentiality.

If you have information about other parties who may have information which may assist EPA in its investigation of the Site or who may be responsible for contamination at the Site, that information should be submitted to EPA within the time period noted above.

Please note that if, after submitting your response, you obtain additional or different information concerning the matters addressed by the information request, it is necessary that you promptly notify EPA. You have a continuing obligation to supplement your response if new or different information should later become known or available to you.

This Request for Information is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501-3520.

Your response to the Request for Information should be mailed to Beverly Kolenberg, Assistant Regional Counsel, Office of Regional Counsel, U.S. Environmental Protection Agency, 290 Broadway, 17th Floor, New York, New York 10007-1866, with a copy to Jennifer LaPoma, Remedial Project Manager, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, 290 Broadway, 20th Floor, New York, New York 10007-1866, or by email to Ms. LaPoma at lapoma.jennifer@epa.gov.

If you have any questions regarding the Request for Information, or would like to discuss this

matter with EPA, you may call Ms. Kolenberg at (212) 637-3167, or send her an email at kolenberg.beverly@epa.gov. We appreciate and look forward to your prompt response to this information request.

Sincerely yours,

Nicoletta Diforte
Senior Enforcement Policy Advisor
Emergency and Remedial Response Division

Enclosures

New Cassel and Hicksville

New York

EPA ID#: NY0001095363

EPA REGION 2

Congressional District(s): 05

Nassau

Southern end of Iris Place

NPL LISTING HISTORY
Proposed Date: 3/10/2011
Final Date: 9/16/2011

Site Description

EPA listed the New Cassel/Hicksville Ground Water Contamination Site (Site) on the National Priorities List (NPL) of sites eligible for long-term remedial action financed under the Comprehensive Environmental Response, Compensation, and Liability Act, more commonly known as Superfund, on September 16, 2011. The Site is considered to be an area of widespread groundwater contamination within the Towns of North Hempstead, Hempstead and Oyster Bay in Nassau County, New York.

In 2010, EPA collected groundwater samples from raw (pre-treated) water from multiple public supply wells (PSWs) in central Nassau County and analyzed the raw water samples to determine whether volatile organic compounds (VOCs) were present above the Maximum Contaminant Level (MCL). VOCs are contaminants that evaporate easily into the air and dissolve in water. The MCL is a federal standard for drinking water quality that is a legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act. EPA's 2010 analytical results determined that there were VOCs above the MCL in the raw water in four Town of Hempstead wells (Bowling Green 1 and 2, Roosevelt Field 10, and Levittown 2A), six Hicksville wells (4-2, 5-2, 5-3, 8-1, 8-3, and 9-3) and Westbury Water District Well 11.

Threat and Contaminants

The primary contaminants of concern for the Site are tetrachloroethylene (PCE), trichloroethylene (TCE) and other VOCs. VOCs are often used as ingredients in paints, solvents, aerosol sprays, cleaners, disinfectants, automotive products and dry cleaning fluids. While no individual sources were identified in EPA's March 2011 Hazard Ranking System listing package for inclusion on the NPL, it is believed that past industrial and commercial activities in the area may have contributed the ground water contamination at the Site.

To date, the New York State Department of Environmental Contamination (NYSDEC) has evaluated 17 individual sites within the New Cassel Industrial Area (NCIA), located in the Town of North Hempstead, which are listed on the Registry of Inactive Hazardous Waste Sites in New York State. Responsible parties for these NCIA sites have implemented remedial actions associated with VOC contamination in soils and on-site groundwater. These sites remain under NYSDEC's oversight.

Within the Town of Hempstead, two public supply wells, Bowling Green Well 1 and 2, located approximately 1,500 feet downgradient of the NCIA were found to have TCE and PCE in raw water above the MCL. Raw groundwater pulled from these wells is treated prior to distribution to a population of more than 8,000 people.

During EPA's 2010 pre-NPL sampling, a public supply well field in Hicksville, which is in the Town of Oyster Bay, was found to have exceedances of PCE and TCE above the MCL in the raw ground water. Water from the Hicksville PSWs is treated prior to distribution to a population of more than 24,000 people.

Concentrations of VOCs above the MCL were also found in Hicksville Well 9-3, Hicksville Well 8-3, Hicksville Well 8-1, Hicksville Well 4-2, Hempstead-Levittown Well 2A, Hempstead-Roosevelt Field Well 10, and Westbury Well 11. The PSWs are tested regularly for water quality prior to distribution to the public and continues to meet federal and state water quality standards.

Cleanup Approach

EPA will be addressing the Site in discrete phases or components known as operable units or OUs. An operable unit

represents a portion of the Site remedy that for technical or administrative purposes can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from Site contamination. EPA anticipates that there will be multiple OUs for the Site, and subsequent Proposed Plans and Records of Decision (RODs) will address groundwater contamination at other OUs at the Site.

The first operable unit at the Site, OU1, addresses a portion of the contaminated groundwater downgradient of the NCIA. In the summer of 2013, EPA expects to release a proposed plan, which discusses the remedial alternatives considered and identifies EPA's proposed remedial alternative with the rationale for EPA's preference to address OU1.

EPA will subsequently conduct remedial investigations to determine the nature and extent of contamination in other operable units. Subsequent operable units will include, but may not be limited to, the areas downgradient of OU1, the Sylvania and the General Instruments sites in Hicksville, as well as areas impacting Hicksville PSWs 4-2, 8-1, 8-3, 0-3 and Hempstead-Levittown 2A.

Cleanup Progress

The New Cassel/Hicksville Ground Water Contamination Site was added to the National Priorities List on September 16, 2011.

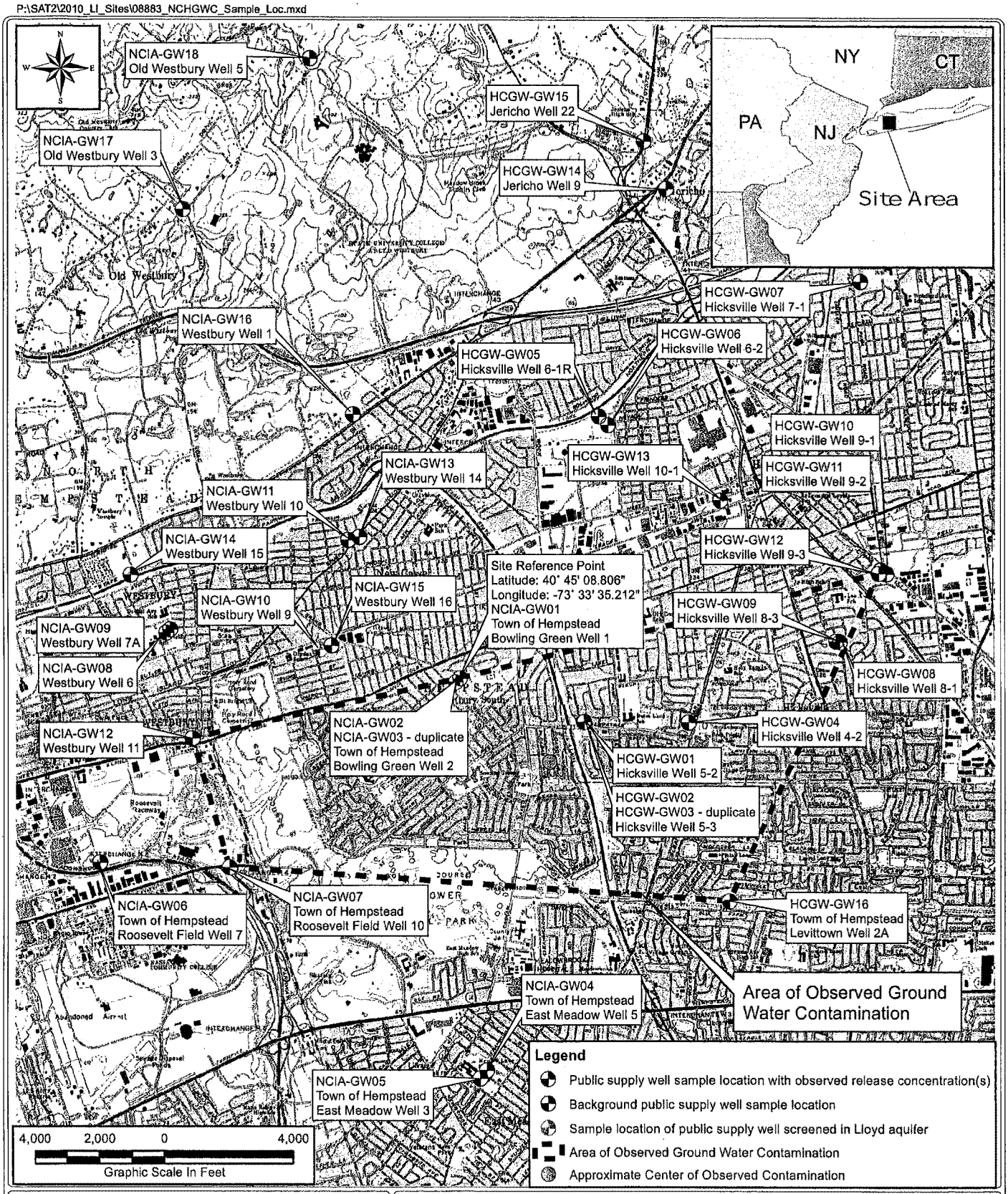
OU1: In the summer of 2013, EPA will be issuing a proposed plan, which identifies the remedial alternatives considered and EPA's proposed remedial alternative with the rationale for EPA's preference. Once the proposed plan is released, a 30-day public comment period will begin. EPA will also hold a public meeting to answer questions and allow community members to comment on the proposed remedial alternatives for the Site's OU1. After the close of the 30-day comment period and consideration of comments, EPA will issue a Record of Decision for OU1 which determines the remedial action to be performed.

Site Repositories

U.S. Environmental Protection Agency, Region 2, Superfund Records Center 290 Broadway, 18th Floor, New York, NY 10007-1866

Contact: Jennifer LaPoma, EPA Remedial Project Manager at 212-637-4328 or LaPoma.Jennifer@epa.gov or Cecilia Echols, EPA Community Involvement Coordinator at 212-637-3678 or Echols.Cecilia@epa.gov

P:\SAT2\2010_LI_Sites\08883_NCHGWC_Sample_Loc.mxd



SOURCES:
1. National Geographic TOPO! U.S. Geologic Survey (USGS). 7-5 Minute Series (Topographic) Quadrangles: Amityville, NY 1992; Freeport, NY 1994; Hicksville, NY 1992; and Huntington, NY 1992.
2. Weston Solutions, Inc. Region 5 Start-3, Site Logbooks 996-4E-AHSW (New Cassel Industrial Area) and 1144-4E-AHSX (Hicksville Contaminated Groundwater Area). August 2010.

TITLE:

Figure 1 - Site Location Map
New Cassel/Hicksville GW Contamination
Towns of Hempstead and Oyster Bay
Nassau County, NY

PROJECT:
New Cassel/Hicksville GW Contamination

CLIENT NAME:
EPA

WESTON SOLUTIONS

DATE:
January 2011

FIGURE #:
1

New Cassel/Hicksville Ground Water Contamination Superfund Site
Located in Towns of Hempstead, North Hempstead and Oyster Bay, Nassau County, New York

INSTRUCTIONS FOR RESPONDING TO REQUEST FOR INFORMATION

A. Directions

1. A complete and separate response should be given for each question.

2. Identify each answer with the number of the question to which it is addressed.

3. For each document produced in response to this Request for Information, indicate on the document, or in some other reasonable manner, the question to which it applies.

4. In preparing your response to each question, consult with all present and former employees and agents of your company whom you have reason to believe may be familiar with the matter to which the question pertains.

5. In answering each question, identify each individual and any other source of information (including documents) that was consulted in the preparation of the response to the question.

6. If you are unable to give a detailed and complete answer, or to provide any of the information or documents requested, indicate the reason for your inability to do so.

7. If you have reason to believe that an individual other than one employed by your company may be able to provide additional details or documentation in response to any question, state that person's name, last known address, phone number and the reasons for your belief.

8. If a document is requested but not available, state the reason for its unavailability. To the best of your ability, identify the document by author, date, subject matter, number of pages, and all recipients of the document with their addresses.

9. If anything is omitted from a document produced in response to this Request for Information, state the reason for, and the subject matter of, the omission.

10. If you cannot provide a precise answer to a question, please approximate but, in any such instance, state the reason for your inability to be more specific.

11. Confidential Information. The information requested herein must be provided even though you may contend that it includes confidential business information or trade secrets. You may assert a confidentiality claim covering part or all of the information requested, pursuant to Sections 104(e)(7)(E) and (F) of CERCLA, 42 U.S.C. §§ 9604(e)(7)(E) and (F), and 40 C.F.R. § 2.203(b).

If you make a claim of confidentiality for any of the information you submit to EPA, you must prove that claim. For each document or response you claim to be confidential, you must separately address the following points:

a. the portions of the information which are alleged to be entitled to confidential treatment;

b. the period of time for which confidential treatment is desired (e.g., until a certain date, until the occurrence of a specific event, or permanently);

c. measures taken by you to guard against the undesired disclosure of the information to others;

d. the extent to which the information has been disclosed to others, and the precautions taken in connection therewith;

e. pertinent confidentiality determinations, if any, by EPA or other federal agencies, and a copy of any such determinations or reference to them, if available; and

f. whether you assert that disclosure of the information would be likely to result in substantial harmful effects on your business' competitive position, and if so, what those harmful effects would be; why they should be viewed as substantial, and an explanation of the causal relationship between disclosure and such harmful effects.

To make a confidentiality claim, please stamp, or type, "Confidential" on all confidential responses and any related confidential documents. Confidential portions of otherwise non-confidential documents should be clearly identified. Please submit your response so that all non-confidential information, including any redacted versions of documents, are in one envelope and all materials for which you desire confidential treatment are in another envelope.

All confidentiality claims are subject to EPA verification. It is important that you satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information, that you intend to continue to do so, and that the information is not and has not been obtainable by legitimate means without your consent. Information covered by such a claim will be disclosed by EPA only to the extent permitted by Section 104(e) of CERCLA and 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, then it may be made available to the public by EPA without further notice to you.

B. Definitions

1. The terms "and" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of these questions any information which might otherwise be construed to be outside of their scope.

2. The term "arrangement" means every separate contract or other agreement between two or more persons.

3. As used herein, and unless otherwise stated, the term "Company" refers to the addressee of this letter or any company, partnership, business, and/or other entity related in any way to the addressee. The term refers to the Company as it is currently constituted, as well as all predecessors and successors in interest of the Company and all subsidiaries, divisions, affiliates, and branches of the Company or of its predecessors or successors.

4. The terms "document" and "documents" shall include writings of any kind, formal or informal, whether or not wholly or partially in handwriting, and electronic communications, including by way of illustration and not by way of limitation any email, letter, memorandum of conversations, meetings, or intra-office communication, and any agreements, contracts, invoices, bills of lading and manifests.

5. As used herein, the term "Facility" shall mean the Company's facility located in the area of the New Cassel/Hicksville Ground Water Contamination Superfund Site, in the Towns of Hempstead, North Hempstead and Oyster Bay in Nassau County, New York.

6. As used herein, the term "industrial waste" shall mean any solid, liquid or sludge or any mixture thereof which possesses any of the following characteristics:

   a. it contains one or more "hazardous substances" (at any concentration) as defined in 42 U.S.C. § 9601(14);
   b. it is a "hazardous waste" as defined in 42 U.S.C. § 6903(5);
   c. it has a pH less than 2.0 or greater than 12.5;
   d. it reacts violently when mixed with water;
   e. it generates toxic gases when mixed with water;
   f. it easily ignites or explodes;
   g. it is an industrial waste product;
   h. it is an industrial treatment plant sludge or supernatant;
   i. it is an industrial byproduct having some market value;
   j. it is coolant water or blowdown waste from a coolant system;
   k. it is a spent product which could be reused after rehabilitation; or
   l. it is any material which you have reason to believe would be toxic if ingested, inhaled or placed in contact with your skin.

7. The term "identify" with respect to a natural person means to set forth the person's name, present and/or last known business address and business telephone number, present

and/or last known home address and home telephone number, and present and/or last known job title, position, or business.

8. The term "identify" with respect to a corporation, partnership, business trust or other association or business entity (including a sole proprietorship) means to set forth its full name, address, legal form (e.g. corporation, partnership, etc.), organization, if any, and a brief description of its business.

9. The term "identify" with respect to a document means to provide its customary business description, its date, its number if any (e.g. invoice or purchase order number), the identity of the author, addressor, addressee and/or recipient, and the substance or the subject matter.

10. As used herein the term "person" shall have the meaning set forth in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

11. As used herein, the term "the Property" shall mean and include any property within the Site that your Company either: (1) presently owns or formerly owned at any time or (2) at which your Company presently operates or formerly operated a Facility at the Site.

12. The term "Site" shall mean and include the Facility and any Property within the New Cassel/Hicksville Ground Water Contamination ("NCHGWC") Superfund Site. The NCHGWC Site comprises a widespread area of ground-water contamination which is located in the Towns of Hempstead, North Hempstead and Oyster Bay, New York. *See* enclosed Site Description and Site Location Map.

13. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in CERCLA or the Resource Conservation and Recovery Act, in which case the statutory definitions shall apply.

REQUEST FOR INFORMATION

1. a. State the correct legal name and mailing address of your Company.

   b. State the name(s) and address(es) of the President, Chief Executive Officer and the Chairman of the Board (or other presiding officer) of the Company.

   c. Identify the state and date of incorporation of the Company and the Company's agents for service of process in the state of incorporation, and in New York State.

   d. If your Company is a subsidiary or affiliate of another corporation or entity, identify each of those other corporations or entities and for each, the President, Chief Executive Officer and Chairman of the Board. Identify the state of incorporation and agents for service of process in the state of incorporation and in New York State for each corporation identified in your response to this question.

2. Identify the address, Section, Block and Lot numbers, and the size of each property (hereinafter, "Property" or "Properties") that your Company either presently owns and/or formerly owned within the Site from the date your Company, or any related company had an ownership interest. (*See* Definitions section for terms.)

3. For each Property identified in response to question 2. in which your Company has and/or had an ownership interest currently or in the past, please identify:

   a. The date your Company acquired an ownership interest. An ownership interest includes, but is not limited to, fee owner, lessor or lessee, licensee and/or operator;

   b. The name and address of all other current and/or previous owners;

   c. All individuals or entities that have leased, subleased or otherwise operated at each Property at any time currently or in the past, and identify the dates (month and year) that each such individual or entity began and ended its leasehold interest or its operations;

   d. Any portion of any Property which was transferred or sold, and the block and lot number, the date of the transfer or sale, the sale price and the entity that acquired the Property;

   e. The relationship, if any, between your Company and each of the individuals and/or other entities identified as having leased or operated at each Property;

   f. Your Company's involvement in all operations conducted by each lessee and/or other individual or entity identified in response to question 3c., above; and

   g. For each Property, provide all documents relevant to your responses to questions

3a.- 3f., above, and provide copies, including, but not limited to, copies of surveys, title search documents, deeds, rent rolls, leases and correspondence.

4. Provide copies of all maps, building plans, floor plans and/or drawings for each Property identified in response to question 2., above. Your response to this question should include, but not be limited to, providing plumbing and drainage system plans for all structures on each Property.

   For both current (if still in operation) and past operations during the period of time that the Company was at a Property, please identify and provide a description of

   a. all surface structures and features (*e.g.*, buildings, above-ground storage tanks, paved, unpaved areas and parking lots, and dates when paved areas were paved);

   b. all past and present plumbing systems, above and below-ground discharge piping, sumps, storm water drainage systems, sanitary sewer systems, septic tanks, dry wells, subsurface disposal fields, and underground storage tanks ; and

   c. all currently existing and previously existing chemical and industrial hazardous substance storage, transfer, spill and disposal areas.

5. For each Property identified in question 2., above, at which your Company conducted operations, describe in detail the manufacturing processes and/or other operations that your Company conducted at the Property, and identify the years during which your Company conducted operations there. If those operations were not constant throughout your Company's operations, describe the nature of all changes in operations, and state the year of each change. If detailed information about your Company's operations is not available, provide, at a minimum, a general description of the nature of your Company's business at the Property, the years of operation, the type of work your Company conducted, and the number of employees for all the operations.

6. With respect to industrial wastes at a Property:

   a. List all industrial wastes that were used, stored, generated, handled or received by your Company at the Property. Your response to this question should include, but not be limited to, use, storage, generation and/or handling of trichloroethylene ("TCE"), tetrachloroethylene ("PCE"), 1,1,1-trichloroethane ("1,1,1-TCA") and other chlorinated or non-chlorinated solvents. Be as specific as possible in identifying each chemical, and provide, among other things, the chemical name, brand name, and chemical content;

   b. State when each industrial waste identified in your response to question 6a., above, was used, stored, generated, handled or received, and state the volume of each industrial waste used, stored, generated and/or handled on an annual basis; and

c. Describe the activity or activities in which each industrial waste identified in your response to question 6a., above, was used, stored, handled or received.

7. Describe in detail how and where the industrial wastes identified in response to question 6., above, were disposed. For each disposal location and method, state the nature and quantity of the material disposed of on an annual basis. For those time periods when a precise quantity is not available, provide an estimate.

8. Describe in detail any knowledge your Company has about intentional or unintentional disposal of industrial wastes at each Property identified in response to question 2., above, including, but not limited to, TCE, PCE and/or other chlorinated or non-chlorinated solvents or wastes containing such solvents, at any time currently or in the past. Your response should include instances in which industrial wastes were spilled or otherwise disposed onto or into the floors or the ground from septic systems, pipes, drains, drums, tanks, or by any other means. Provide copies of all documents relevant to your response.

9. Identify all leaks, spills, or releases of any kind of any industrial wastes (including, but not limited to, TCE and PCE or other chlorinated or non-chlorinated solvents or wastes containing such solvents) into the environment that have occurred, or may have occurred, at or from the Property, including any leaks or releases from drums and other containers. Provide copies of all documents relevant to your response.

10. Explain whether any repairs or construction were implemented to address any leaks, spills, releases or threats of releases of any kind, the nature of the work and the dates of any such work. Provide copies of all analyses, characterizations, environmental assessments or studies or any report or other description of any investigations, removal actions, remedial activities, or any other work conducted by your Company or by any other party on your Company's behalf relating to industrial wastes released at or from any Property and/or the Site. If any copies of the records requested in this question are available electronically, kindly submit your answer to this question on a disk.

11. Provide copies of all insurance policies held and indemnification agreements entered into by the Company which may potentially indemnify the Company against any liability which it may be found to have under CERCLA for releases and threatened releases of hazardous substances at and from the Property. In response to this request, please provide not only those insurance policies and agreements which currently are in effect, but also those that were in effect during any portion of the time the Company conducted operations at, or held a property interest. Your response should also identify the specific Property related to each policy and/or agreement.

12. State the names, telephone numbers and present or last known addresses of all individuals whom you have reason to believe may have knowledge, information or documents regarding the use, storage, generation, disposal of or handling of industrial wastes at the Site, the transportation of such materials to the Site, or the identity of any companies whose material was treated or disposed of at the Site.

13. If you have information or documents which may help EPA identify other companies that conducted operations, owned property, or were responsible for the handling, use, storage, treatment, or disposal of industrial wastes that potentially contributed to chlorinated solvent contamination of the Site, please provide that information and those documents, and identify the source(s) of your information.

14. Please state the name, title and address of each individual who assisted or was consulted in the preparation of your response to this Request for Information. In addition, state whether each such person has personal knowledge of the answers provided.

CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

State of

County of _____:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information regarding the New Cassel/Hicksville Site) and all documents submitted herewith, and that I believe that the submitted information is true, accurate, and complete, and that all documents submitted herewith are complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that I am under a continuing obligation to supplement my response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information or my response thereto should become known or available to me.

_____

NAME (print or type)

_____

TITLE (print or type)

_____

SIGNATURE

Sworn to before me this

__ day of _____, 2013

_____

Notary Public